

INSTALLATION INSTRUCTIONS

AFTERBURNER SWITCHABLE COIL #140025

Reading these instructions before starting the installation process will ensure that you will be able to take the maximum advantage of all the performance that your ACCEL Afterburner switchable coil was designed to deliver.

The ACCEL Afterburner switchable coil is designed to work on most vehicles equipped with a distributor and a single coil type ignition system. It will work with the stock vehicles ignition controls as well as most aftermarket inductive storage as well as CD type ignition control boxes.

In the normal mode the ACCEL Afterburner switchable coil is designed to boost the amperage available at the spark plug for improved low RPM engine performance, maximum load conditions such as when towing as well as helping to maximizing your fuel efficiency. In the switched mode the ACCEL Afterburner coil is design to boost voltage at the spark plug for improved high RPM performance under higher cylinder pressure conditions typically found when under boost or using nitrous oxide as well as helping to eliminate high RPM misses.

<u>NEVER</u> switch the modes of the ACCEL Afterburner coil while the engine is running! During the time it takes to switch the ACCEL Afterburner coil from one mode to the other, several ignition events could be missed if the engine was running, even at idle speed. This could cause an engine miss-fire and resulting in exhaust and/or intake system damage. Any vehicle damage that could result from switching the ACCEL Afterburner coil while the engine is running will <u>NOT</u> be covered under the product's limited warranty nor is any coverage of said possible damage is implied.

Due to the high-energy output, the ACCEL Afterburner switchable coil is supplied with an ACCEL 300+ 8.8mm universal coil lead. The extruded aluminum housing/mounting bracket is designed with cooling fins for efficient heat dissipation. A mounting/ installation hardware kit is included. A universal wiring harness is also included. This OEM quality harness is designed to work with most vehicles' engine compartment layouts.

Step #1

Choose an area on the fire well or fender well where the ACCEL Afterburner coil may be mounted with no interference from throttle linkage, air conditioning lines, heater hoses, etc. and is no further than 24" from the distributor. Please note that the ACCEL Afterburner coil may not fit into your original coil's mounting location.

Caution: Before drilling any holes, please check and be aware of what you may be drilling into. Be sure not to damage a component that may be under or in line with a mounting hole.

Step #2

Use the supplied fasteners in the hardware kit to mount the ACCEL Afterburner switchable coil.

Step #3

The ACCEL Afterburner switchable coil comes with a universal wiring harness. This harness must be spliced into the vehicles OE wiring harness at the OC coil connection using the butt splices connectors supplied in the hardware kit. The yellow wire lead in the ACCEL harness must be connected to the OE coil (+) positive lead, while the black wire lead of the ACCEL harness must be connected to the OE coil (-) negative harness wire lead. Please refer to your specific vehicles' shop manual for the exact color coding of the coil positive and coil negative leads before cutting the OEM harness and splicing in the ACCEL harness.

The blue wire lead in the ACCEL harness must be connected to a vehicle 12 V switched ignition source.

You can usually find a source for 12 V switched ignition source on the ignition "on" powered side of the fuse panel. Depending on the vehicle, there are some times extra terminal positions in the ignition "on" powered side of the fuse panel that can be plugged into or tap into with the proper fuse panel terminals (not included). If in doubt, please refer to your specific vehicle's shop manual.

Plug the 3-way weather pack connector on the ACCEL harness to the 3-way connector on the ACCEL Afterburner switchable coil. Do not force the connectors together as they are designed to be inserted only one way.

Install the relay onto the mating 5-way connector on the harness. Again the connector and relay are designed to be inserted only one way, with the lock tabs aligned on the same side. Be careful not to bend any of the tabs on the bottom of the relay when inserting the connector. Secure the relay inside the engine compartment so that it is not free to move around.

Step #4

Find an appropriate location inside the vehicle for the arming switch. This can be anywhere on the lower dash, console or hidden under the dash, inside the console or other compartments. There must be approximately 2-1/2" of clear space behind the mounting surface to fit the switch and the wiring harness.

Note: It takes a bit of force to flip up the cover on the arming switch, so make sure the mounting location is strong enough to handle the job. You may have to reinforce the location with additional sheet material to spread the force out and keep the switch firmly attached.

The switch must be installed from behind the mounting surface, so make sure you can gain the required access behind the mounting surface. If desired, a remote switch mount (not included) can also used to mount the switch from say below the dash. Also note the alignment tab on the arming switch cover plate and the slot in the switch threads. This means that the arming switch and cover plate can only be assembled one way. You want to position the arming switch so that the cover flips forward or upward to gain access to the switch toggle. The ACCEL Afterburner coil is switched between modes by the arming switch. When the arming switch is in the normal or off position, the Afterburner coil is in the low RPM mode. By toggling the switch to the on position, you are switching the ACCEL Afterburner coil into the high RPM mode. By closing the switch cover you are also turning the switch toggle off at the same time and also returning the ACCEL Afterburner coil to the low RPM mode.

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Step #5

Route the green and brown leads of the ACCEL wiring harness through the fire wall, behind the dash to the selected switch mounting point, making sure the two pre-insulated terminals can reach the desired switch location. If you need to drill any holes in the firewall to gain access for the harness, make sure to use the supplied grommet in the hardware kit to protect the wires from chaffing. Also make sure that once the harness is positioned and secured that you seal up any openings that you may have had to make in the fire wall with a water proof material such as an RTV sealant (not included).

The arming switch is a DPDT (double pole, double throw) type switch. That means it has two rows of terminal tabs on the back of the switch. Each one of these terminal tabs are numbered, #1 though #6. You need to plug the pre-insulated terminal on the green lead of the ACCEL harness onto terminal tab #1 and the pre-insulated terminal on brown lead of the ACCEL harness onto terminal tab #2. The ring terminal on the other end of the brown lead must be secured to a ground. Typically a good ground source would be one of the dashboard support bolts or one of the grounding posts found under the dash used by the OEM dash harness.

NOTE: Make sure the green and brown leads are properly plugged into the switch prior to mounting the switch.

Step #6

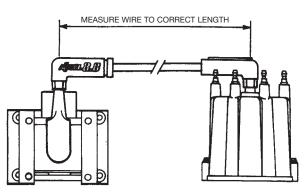
Once a favorable switch location is found, it is determined that the ACCEL green and brown leads can reach that location and are both plugged into the back of the switch, it's time to mount the arming switch. Use either a 15/32" or a 1/2" drill bit to drill the hole in the mounting surface to locate the switch. Make sure not to damage any components that might be found behind the mounting surface. Insert the switch into the hole from behind the mounting surface. Slip the arming cover plate over the switch. Note the alignment tab and slot on the arming cover plate and the switch. Secure the switch and arming cover plate to the switch with the switch nut.

Step #7

Carefully route the ACCEL harness away from any linkage, air conditioning lines, heater hoses, exhaust manifolds, etc. by using the mounting hardware included in the kit.

Step #8

Measure the coil wire to the length. Connect the ACCEL 300+ 8.8mm coil wire to the ACCEL Afterburner switchable coil and measure the length needed to the distributor cap, then add an extra 1/2" to 1" to the length. Once the finished length is determined, cut and terminate with the supplied terminal.



A) Carefully strip the wire to expose 1/2" to 5/8" of the conductor core.

DO NOT SLIT THE CORE



DO NOT SHRED OR STRIP AWAY THE CORE

B) Bend the core conductor back over the wire and insert into the terminal.



C) Bend the terminal tabs over with pliers and/or an ignition wire-crimping tool.

Note: For best results, use the ACCEL p/n's 170036 or 170037 crimping tool.



D) Lightly lubricate the terminal with the dielectric grease included and slide the wire into the HEI boot. A small amount of dielectric grease may also be applied inside of both the distributor and coil boot to help prevent any high voltage leakage.



E) Be sure you have made a good connection on the distributor cap and coil. You should recheck these connections periodically. If the connector in either boot becomes grey-green in color or appears corroded, you may have a poor connection.

You have completed the installation of the ACCEL Afterburner switchable coil and you are now ready to now enjoy increased ignition performance.

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